



## Complete Summary

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### GUIDELINE TITLE

ASPAN pain and comfort clinical guideline.

### BIBLIOGRAPHIC SOURCE(S)

ASPAN pain and comfort clinical guideline. J Perianesth Nurs 2003 Aug; 18(4): 232-6. [18 references]

### GUIDELINE STATUS

This is the current release of the guideline.

An update of this guideline is planned to be released in 2008.

### \*\* REGULATORY ALERT \*\*

### FDA WARNING/REGULATORY ALERT

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory information has been released.

On September 30, 2004, Vioxx (rofecoxib) was withdrawn from the U.S. and worldwide market due to safety concerns of an increased risk of cardiovascular events. See the [U.S. Food and Drug Administration \(FDA\) Web site](#) for more information.

Subsequently, on April 7, 2005, after concluding that the overall risk versus benefit profile is unfavorable, the FDA requested that Pfizer, Inc voluntarily withdraw Bextra (valdecoxib) from the market. The FDA also asked manufacturers of all marketed prescription nonsteroidal anti-inflammatory drugs (NSAIDs), including Celebrex (celecoxib), a COX-2 selective NSAID, to revise the labeling (package insert) for their products to include a boxed warning and a Medication Guide. Finally, FDA asked manufacturers of non-prescription (over the counter [OTC]) NSAIDs to revise their labeling to include more specific information about the potential gastrointestinal (GI) and cardiovascular (CV) risks, and information to assist consumers in the safe use of the drug. See the [FDA Web site](#) for more information.

Most recently, on June 15, 2005, the FDA requested that sponsors of all non-steroidal anti-inflammatory drugs (NSAID) make labeling changes to their products. FDA recommended proposed labeling for both the prescription and over-the-counter (OTC) NSAIDs and a medication guide for the entire class of prescription products. All sponsors of marketed prescription NSAIDs, including

Celebrex (celecoxib), a COX-2 selective NSAID, have been asked to revise the labeling (package insert) for their products to include a boxed warning, highlighting the potential for increased risk of cardiovascular (CV) events and the well described, serious, potential life-threatening gastrointestinal (GI) bleeding associated with their use. FDA regulation 21CFR 208 requires a Medication Guide to be provided with each prescription that is dispensed for products that FDA determines pose a serious and significant public health concern. See the [FDA Web site](#) FDA Web site for more information.

## COMPLETE SUMMARY CONTENT

\*\* REGULATORY ALERT \*\*

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## SCOPE

DISEASE/CONDITION(S)

Pain

GUIDELINE CATEGORY

Evaluation

Management

CLINICAL SPECIALTY

Anesthesiology

Critical Care

Nursing

INTENDED USERS

Advanced Practice Nurses

Health Care Providers

Nurses

Physicians

GUIDELINE OBJECTIVE(S)

To provide a standardized evidence-based approach to the management of patients' pain and comfort in all perianesthesia settings

#### TARGET POPULATION

Patients who require pain/symptom management

#### INTERVENTIONS AND PRACTICES CONSIDERED

##### Evaluation

1. Assessment of status/vital signs; medical, pain and analgesic history; patient's preferences (cultural, pain/comfort acceptable levels); patient's educational needs
2. Review laboratory results (e.g. prolonged prothrombin time (PT), partial thromboplastin time (PTT), and abnormal international normalized ratio (INR) and platelet count
3. Assessment parameters (e.g., functional level and ability to relax, self-reported pain rating scale, self-reported comfort level; physical appearance; other sources of discomfort; achievement of pain relief/comfort goals

##### Management

1. Identify patient correctly; validate physician's order, implement correct drug, dose, amount, route and time include type of surgery and surgical site as applicable
2. Patient and family education regarding pain and comfort assessment
3. Pharmacologic intervention (e.g., opioids, non-opioids, adjuvants)
4. Nonpharmacologic interventions
5. Physical, sociocultural, psychospiritual, environmental and cognitive behavioral needs

#### MAJOR OUTCOMES CONSIDERED

Not stated

## METHODOLOGY

#### METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases  
Searches of Unpublished Data

#### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Electronic searches were conducted of Medline and CINAHL.

#### NUMBER OF SOURCE DOCUMENTS

Not stated

## METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus  
Expert Consensus (Committee)  
Subjective Review

## RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

## METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses  
Systematic Review

## DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

## METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus  
Expert Consensus (Consensus Development Conference)  
Informal Consensus

## DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The first phase of the development of the Perianesthesia Pain and Comfort Clinical Guideline was initiated in the fall of 2001, when a Pain and Comfort Consensus Strategic Work Team (SWT) was appointed to facilitate the guideline development process. The team was charged to convene both a preconsensus and consensus conference, which were required to develop the guideline. The purpose of these consensus meetings was to provide expert discussion of current practices in pain and comfort management among perianesthesia nurses. It was thought that by reaching consensus among perianesthesia nurses and pain experts, the most appropriate activities could be identified to achieve the stated outcomes.

A preconsensus conference was held in October 2001, in Philadelphia, PA. The preconsensus conference consisted of a focus group of American Society of Perianesthesia Nurses (ASPN) leaders that included the Director for Clinical Practice, Director for Education, Director for Research, and specifically identified committee chairs and experts in the field. The purpose of this meeting was to conduct a preliminary discussion on current pain/comfort management practices and to reach consensus on these practices. This preconsensus conference also defined the timeline for the remainder of the project.

The third phase in the development of the guideline was a consensus conference held in January 2002, in Nashville, TN. The consensus conference attendees included perianesthesia nurses, educators, and managers from a variety of

geographic locations. There were also attendees representing specialty nursing organizations such as the American Association of Nurse Anesthetists (AANA). The purpose of the consensus conference was to provide expert presentations on the management of pain and comfort of patients. The consensus conference also provided discussion time to review current clinical practices and to identify the most appropriate nursing actions to relieve pain and provide comfort to perianesthesia patients. The outcome of the consensus conference was the development of the first draft of the Perianesthesia Pain and Comfort Clinical Guideline.

The fourth phase of the development process was the identification of the care elements specific to each perianesthesia setting. A draft of the Pain and Comfort Clinical Guideline was developed and then evaluated by perianesthesia nursing experts.

#### RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

#### COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

#### METHOD OF GUIDELINE VALIDATION

Clinical Validation-Pilot Testing  
External Peer Review  
Internal Peer Review  
Peer Review

#### DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

A draft of the guideline was first validated by 15 perianesthesia nursing experts. The guideline was then pilot tested by perianesthesia nurses from different settings with the purpose of identifying areas that needed improvement before conducting the research study for final guideline validation.

The final phase in the guideline development process was a research study to evaluate clarity, usability, and feasibility of the guideline in a variety of perianesthesia settings. The results showed that the ASPAN Perianesthesia Pain and Comfort Clinical Guideline is clear, usable, and feasible in all perianesthesia settings.

The final guideline document was reviewed and approved by the Institutional Review Board of the Johns Hopkins Hospital in Baltimore, Maryland.

### RECOMMENDATIONS

#### MAJOR RECOMMENDATIONS

## Preoperative Phase

### Assessment

1. Vital signs including pain and comfort goals (e.g., 0 to 10 scale)
2. Medical history (e.g., neurologic status, cardiac and respiratory instability, allergy to medication, food and objects, use of herbs, motion sickness, sickle cell, fibromyalgia, use of caffeine/substance abuse, fear, and anxiety)
3. Pain history (e.g., preexisting pain, acute, chronic, pain level, pattern, quality, type of source, intensity, location, duration/ time, course, pain effect, and effects on personal life)
4. Pain behaviors/expressions or history (e.g., grimacing, frowning, crying, restlessness, tension, and discomfort behaviors [e.g., shivering, nausea, and vomiting]. Note that physical appearance may not necessarily indicate pain/ discomfort or its absence.)
5. Analgesic history (type [i.e., opioid, non-opioid, and adjuvant analgesics], dose, frequency, effectiveness, adverse effects, other medications that may influence choice of analgesics [e.g., anticoagulant, antihypertensive, muscle relaxants])
6. Patient's preferences (e.g., for pain relief/comfort measures, expectations, concerns, aggravating and alleviating factors, and clarification of misconceptions)
7. Pain/comfort acceptable levels (e.g., patient and family [as indicated] agree to plan of treatment/interventions postoperatively)
8. Comfort history (i.e., physiological, sociocultural, psychospiritual, and environmental [e.g., spiritual beliefs/symbols, warming measures, music, comfort objects, privacy, positioning, factors related to nausea/vomiting])
9. Educational needs (i.e., consider age or level of education, cognitive and language appropriateness, and barriers to learning)
10. Cultural language preference, identification of personal beliefs, and resulting restrictions
11. Pertinent laboratory results (e.g., prolonged prothrombin time [PT], partial thromboplastin time [PTT], and abnormal international normalized ratio [INR] and platelet count to determine risk for epidural hematoma in patients with epidural catheter)

### Interventions

1. Identify patient, validate physician's order and procedure (i.e., correct name of drug, dose, amount, route, and time, and validate type of surgery and correct surgical site as applicable)
2. Discuss pain and comfort assessment (i.e., presence, location, quality, intensity, age, language, condition, and cognitively appropriate pain rating scale [e.g., 0 to 10 numerical scale or FACES scale] and comfort scale. Assessment method must be the same for consistency.)
3. Discuss with patient and family (as indicated) information about reporting pain intensity using numerical or FACES rating scales and available pain relief and comfort measures (include discussion of patient's preference for pain and comfort measures; implement comfort measures)(i.e., physiological, sociocultural, spiritual, environmental support as indicated by patient)
4. Discuss and dispel misconceptions about pain and pain management

5. Encourage patient to take a preventive approach to pain and discomfort by asking for relief measures before pain and discomfort are severe or out of control
6. Educate purpose of intravenous or epidural patient-controlled analgesia (PCA) as indicated; educate about use of nonpharmacologic methods (e.g., cold therapy, relaxation breathing, music)
7. Discuss potential outcomes of pain and discomfort treatment approaches
8. Establish pain relief/comfort goals with the patient (e.g., a pain rating of less than 4 [scale of 1 to 10] to make it easy to cough, deep breathe, and turn); premedicate patients for sedation, pain relief, comfort (e.g., non-opioid, opioid, antiemetics as ordered; consider needs of chronic pain patients)
9. Arrange interpreter throughout the continuum of care as indicated
10. Utilize interventions for sensory-impaired patients (e.g., device to amplify sound, sign language, and interpreters)
11. Report abnormal findings including laboratory values (prolonged PT/PTT and abnormal INR and platelet count among epidural patients)
12. Arrange for parents to be present for children

#### Expected Outcomes

1. Patient states understanding of care plan and priority of individualized needs
2. Patient states understanding of pain intensity scale, comfort scale, and pain relief/comfort goals
3. Patient establishes realistic and achievable pain relief/comfort goals (e.g., a pain rating of less than 4 [scale 0 to 10] to make it easier to cough, deep breathe, and turn upon discharge)
4. Patient states understanding or demonstrates correct use of PCA equipment as indicated
5. Patient verbalizes understanding of importance of using other nonpharmacologic methods of alleviating pain and discomfort (e.g., cold therapy, relaxation breathing, music)

#### Postanesthesia Phase I

##### Assessment

1. Refer to preoperative phase assessment, interventions, and outcomes data
2. Type of surgery and anesthesia technique, anesthetic agents, reversal agents
3. Analgesics (i.e., non-opioid, opioid, adjuvants given before and during surgery, time and amount at last dose, and regional [e.g., spinal/epidural])
4. Pain and comfort levels on admission and until transfer to receiving unit or discharge to home (Reassess frequently until pain or discomfort is controlled. During sedation procedure, assess continuously.)
5. Assessment parameters
  - A. Functional level and ability to relax
  - B. Pain: type, location, intensity (i.e., using self-report pain rating scale whenever possible [age, language, condition, and cognitive appropriate tools], quality, frequency [continuous or intermittent], and sedation level; patient's method of assessment and reporting need to be the same during the postoperative continuum of care for consistency.) Note pain level at rest and during activity.

- C. Self-report of comfort level using numerical scale (0 to 10 scale) or other institutional approved instruments
- D. Physical appearance (e.g., pain/discomfort behaviors [Note: Pain behaviors are highly individual and the absence of any specific behavior (e.g., facial expression, body movement) does not mean the absence of pain.])
- E. Other sources of discomfort (e.g., position, nausea and vomiting, shivering, environment such as noise, noxious smell, anxiety)
- F. Achievement of pain relief/comfort treatment goals
- 6. Age, cognitive ability, and cognitive learning methods
- 7. Status/vital signs
  - A. Airway patency, respiratory status, breath sounds, level of consciousness, and pupil size as indicated and other symptoms related to the effects of medications
  - B. Blood pressure
  - C. Pulse/cardiac monitor rhythm
  - D. Oxygen saturation
  - E. Motor and sensory functions post– regional anesthesia technique

## Interventions

1. Identify patient correctly; validate physician's order; implement correct drug, dose, amount, route, and time; include type of surgery and surgical site as applicable
2. Pharmacologic (medicate as ordered)
  - A. Mild to moderate pain—use non-opioids and may consider opioids (e.g., acetaminophen nonsteroidal anti-inflammatory drugs [NSAIDs], cyclooxygenase 2 [Cox-2] inhibitors). All the patient's regular non-opioid prescription medications should be made available unless contraindicated and per institutional approval.
  - B. Moderate to severe pain—use multimodal therapy (e.g., combine non-opioid and opioid)
  - C. Utilize the 3 analgesic groups appropriately (consider multimodal therapy)
    - i. Non-opioids (e.g., acetaminophen, NSAIDs, Cox-2 inhibitors); adjuvants non-opioids (acetaminophen and NSAIDs, such as aspirin, ketorolac, ibuprofen, Cox-2 inhibitors).
    - ii. Mu-agonist opioids (e.g., morphine, hydromorphone, fentanyl)
    - iii. Adjuvants
      - a. Multipurpose for chronic pain (e.g., anticonvulsants, tricyclic antidepressants, corticosteroids, antianxiety medication)
      - b. Multipurpose for moderate to severe acute pain (e.g., local anesthetics, ketamine)
      - c. Neuropathic continuous pain— antidepressants, tricyclic antidepressants, oral or local anesthetic
      - d. Neuropathic lancinating pain- (stabbing, knifelike pain) anticonvulsant, baclofen
      - e. Malignant bone pain—corticosteroids, calcitonin
      - f. Post–orthopedic surgery—consider muscle relaxants if patient experiences muscle spasm



3. Initiate and adjust IV and regional infusions (PCA) as indicated and ordered, and based on hemodynamics status (Refer to institutional permissive procedure.)
4. Nonpharmacologic intervention use to complement, not replace, pharmacologic interventions
5. Administer comfort measures as needed
  - A. Physiological (e.g., positioning, pillow, heat and cold therapies, sensory aids [e.g., dentures, eye glasses, hearing aids]; use meperidine [Demerol] for shivering, antiemetics, e.g., Reglan, Zofran as ordered)
  - B. Sociocultural (e.g., family/caregiver, interpreter visit)
  - C. Psychospiritual (e.g., chaplain or cleric of choice, religious objects/symbols)
  - D. Environmental (e.g., confidentiality, privacy, reasonably quiet room)
6. Cognitive behavioral (e.g., education/instruction, relaxation, imagery, music, distraction, biofeedback)

#### Expected Outcomes

1. Patient maintains hemodynamic stability including respiratory/cardiac status and level of consciousness
2. Patient states achievement of pain relief/ comfort treatments goals (e.g., acceptable pain relief with mobility at time of transfer or discharge)
3. Patient states he/she feels safe and secure with the instructions (e.g., use of PCA machine)
4. Patient shows effective use of at least one nonpharmacologic method (i.e., breathing relaxation techniques)
5. Patient shows effective use of PCA as indicated and discusses expected results of regional techniques
6. Patient verbalizes evidence of receding pain level and increased comfort with pharmacologic and nonpharmacologic interventions

#### Postanesthesia Phase II / III

#### Assessment

1. Refer to preoperative phase and Phase I assessments, interventions, and outcomes data
2. Achievement of pain/comfort treatment goals and level of satisfaction with pain relief and comfort management
3. Pain relief/comfort management plan for discharge and patient agreement
4. Educational and resource needs, considering age, language, condition, and cognitive appropriateness

#### Interventions

1. Identify patient correctly; validate physician's order; implement correct drug, dose, amount, route, and time
2. Pharmacologic interventions (medicate as ordered): non-opioid (e.g., acetaminophen, NSAIDs, Cox- 2 inhibitors), Mu-agonist opioids (e.g., morphine, hydromorphone, fentanyl), and adjuvant analgesics (e.g., local anesthetics).

3. Continue and/or initiate nonpharmacologic measures from Phase I
4. Educate patient and family/caregiver
  - A. Pain and comfort measures
  - B. Untoward symptoms to observe
  - C. Regional or local anesthetic effects dissipating after discharge (e.g., numbness, motor weakness, or inadequate relief) and potential adjustments as applicable
  - D. Availability of resource as needed
5. Discuss misconceptions, expectations and implement plan of action satisfactory to patients
6. Address nausea with pharmacologic interventions or other techniques and discuss expectations

#### Expected Outcomes

1. Patient states acceptable level of pain relief and comfort with movement or activity at time of transfer or discharge to home
2. Patient verbalizes understanding of discharge instruction plans
  - A. Specific drug to be taken
  - B. Frequency of drug administration
  - C. Potential side effects of medication
  - D. Potential drug interactions
  - E. Specific precaution to follow when taking medication (e.g., physical limitation, dietary restrictions)
  - F. Name and telephone number of the physician/resource to notify about pain, problems and other concerns
3. Patient states understanding or shows effective use of nonpharmacologic methods (e.g., cold/heat therapy, relaxation breathing, imagery, music)
4. Patient states achievement of pain/ comfort treatment goals and level of satisfaction with pain relief and comfort management in the perianesthesia setting

#### CLINICAL ALGORITHM(S)

None provided

### EVIDENCE SUPPORTING THE RECOMMENDATIONS

#### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

### BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

#### POTENTIAL BENEFITS

Effective nursing management of patient pain and comfort in all perianesthesia settings

## POTENTIAL HARMS

None stated

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

To maximize the benefits of this guideline, perianesthesia nurses need to read and use the entire guideline and resource materials, which include pharmacologic and nonpharmacologic methods of pain and comfort assessments.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

End of Life Care  
Getting Better  
Living with Illness

### IOM DOMAIN

Effectiveness  
Patient-centeredness

## IDENTIFYING INFORMATION AND AVAILABILITY

### BIBLIOGRAPHIC SOURCE(S)

ASPAN pain and comfort clinical guideline. J Perianesth Nurs 2003 Aug; 18(4): 232-6. [18 references]

### ADAPTATION

Not applicable: The guideline was not adapted from another source.

### DATE RELEASED

2003 Aug

### GUIDELINE DEVELOPER(S)

American Society of PeriAnesthesia Nurses

#### SOURCE(S) OF FUNDING

American Society of PeriAnesthesia Nurses

#### GUIDELINE COMMITTEE

Not stated

#### COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

#### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

#### GUIDELINE STATUS

This is the current release of the guideline.

An update of this guideline is planned to be released in 2008.

#### GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the [American Society of PeriAnesthesia Nurses Web site](#).

Print copies: Available from the American Society of PeriAnesthesia Nurses, 10 Melrose Avenue, Suite 110, Cherry Hill, NJ 08003-3696

#### AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Krenzischek, DA., et al. Clinical evaluation of the ASPAN pain and comfort clinical guideline. 2004 Jun.
- Krenzischek, DA., Wilson, L. An introduction to the ASPAN pain and comfort clinical guideline. 2003 Aug.

Print copies: Available from the American Society of PeriAnesthesia Nurses, 10 Melrose Avenue, Suite 110, Cherry Hill, NJ 08003-3696

#### PATIENT RESOURCES

None available

#### NGC STATUS

This NGC summary was completed by ECRI on September 23, 2004. The information was verified by the guideline developer on October 29, 2004. This summary was updated by ECRI on January 12, 2005 following the release of a public health advisory from the U.S. Food and Drug Administration regarding the use of some non-steroidal anti-inflammatory drug products. This summary was updated on April 15, 2005 following the withdrawal of Bextra (valdecoxib) from the market and the release of heightened warnings for Celebrex (celecoxib) and other nonselective nonsteroidal anti-inflammatory drugs (NSAIDs). This summary was updated by ECRI on June 16, 2005, following the U.S. Food and Drug Administration advisory on COX-2 selective and non-selective non-steroidal anti-inflammatory drugs (NSAIDs).

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